Bo Yu | 俞 波

yu_nami@outlook.com
https://yu-nami.github.io
Room 4.2.02.796, NW II, Universität Bayreuth, Universitätsstrasse 30
95440 Bayreuth, Germany

Education

09/2020−Present **Ph.D. Candidate**, Polymer Materials, Zhejiang University (expected 03/2026)
GPA is not considered

09/2016−08/2020 **Bachelor**, Polymer Materials and Engineering, Zhejiang University
Overall GPA 89.11/100, The last two years GPA: 89.74/100

Research and Working Experience

03/2025−Present **Visiting researcher, University of Bayreuth, Bayreuth, Germany**
Supervisor: Prof. Dr. Seema Agarwal
Topic: Effect of polymer architectures and functional group type on antimicrobial efficiency
- Polypeptide synthesis based on ring-opening polymerization of *N*-carboxyanhydrides
- Post-modification of polypeptides

09/2020−Present **Ph. D researcher, Zhejiang University, Hangzhou, China**
Supervisors: Prof. Dr. Qiao Jin, Prof. Dr. Jian Ji
Topic: ROS-responsive boronate esters for precise theranostics of acute kidney injury
- Design, synthesis and characterization of oxidative stress-responsive boronate esters for theranostics of kidney injury, based on antioxidants and fluorescent probes
- Fabrication of nanomedicines via supramolecular interactions
- Evaluation of anti-inflammatory efficacy *in vitro* and *in vivo*

07/2022−08/2022 **R&D Research Intern, Zylox-Tonbridge Medical Co., Ltd, Hangzhou, China**
Department: R&D Division
Task: Evaluated crystallization degree of drug coatings on interventional medical devices
- Investigated analytical techniques for characterizing drug crystallinity in coated pharmaceutical systems.
- Performed XRD data processing, peak fitting, and crystallinity analysis to support formulation evaluation.
- Drafted comprehensive technical reports detailing analytical methods, data interpretation, and key findings.

09/2019−08/2020 **Undergraduate researcher, Zhejiang University, Hangzhou, China**
Supervisor: Prof. Dr. Qiao Jin
Topic: A supramolecular nitric oxide nano-delivery system for prevention of tumor metastasis by inhibiting platelet activation and aggregation
- Synthesis of polypeptide-based host-guest assemblies for nitric oxide delivery
- Evaluation of anti-tumor and anti-metastasis efficacy *in vitro* and *in vivo*

07/2019−08/2019 **Visiting student, University of Bayreuth, Bayreuth, Germany**
Supervisor: Prof. Dr. Andreas Greiner

Topic: Synthesis of completely bio-based polycarbonate

- Conducted copolymerization of trans-limonene epoxide and CO_2 to explore sustainable polymer synthesis.

11/2017−06/2019 **Student Research Training Program Leader, Zhejiang University, Hangzhou, China**
Supervisor: Prof. Dr. Jun Ling
Topic: The effect of rare earth catalysts on *Janus Polymerization*

- Copolymerization of *N*-ethyl glycine *N*-thiocarboxyanhydride and tetrahydrofuran using Schlenk techniques

Teaching

Teaching Assistant, *Lab Training for Polymer Physics* (Undergraduate Course)
Zhejiang University, Fall & Winter 2020

Teaching Assistant, *Introduction of Functional Polymer* (Undergraduate Course)
Zhejiang University, Spring 2022, Spring 2023

Teaching Assistant, *Progress in Polymer Science and Engineering* (Undergraduate Course)
Zhejiang University, Spring 2024

Teaching Assistant, *Polymer Material Design and Practice* (Undergraduate Practice)
Zhejiang University, Summer 2023, Summer 2024

Teaching Assistant, *SRTP Undergraduate Research Project Supervision*
Zhejiang University, Spring & Summer 2024

Teaching Assistant, *Undergraduate Thesis Supervision*
Zhejiang University, Fall & Winter 2024

Teaching Assistant, *Undergraduate Thesis Supervision*
Zhejiang University, Spring 2022

Conference

Bayreuth Polymer Sympothsium (2025), Bayreuth, Germany
The 2nd Chinese Conference on Biomedical Polymeric Materials (2023), Xiameng, China. *Poster*
The 2023 National Symposium on Polymer Science (2023), Wuhan, China. *Poster*

Honor

Zhejiang University Outstanding Graduate Student 2024, 2023, 2022
Zhejiang University Outstanding Student First-Class Scholarship 2019
Zhejiang University Outstanding Student Second-Class Scholarship 2018 2017

Publications

[+]Equivalent contribution

1. F. Jia[+], **B. Yu**[+], J. Li, F. Cai, G. Fu, Q. Jin, J. Ji: Supramolecular nano-assembly of caffeate-strengthened phenylboronic ester with multistep ROS scavenging ability for targeted therapy of acute kidney injury. *Adv. Healthc. Mat*. 12, 2301615 (2023) DOI: 10.1002/adhm.202301615

2. **B. Yu**, Y. Deng, F. Jia, Y. Wang, Q. Jin, J. Ji: A supramolecular nitric oxide nanodelivery system for prevention of tumor metastasis by inhibiting platelet activation and aggregation. *ACS Appl. Mater. Interfaces* 13, 48515 (2022) DOI: 10.1021/acsami.2c15882

3. J. Ye[+], **B. Yu**[+], H. Hu, D. Zhou, Q. Jin, J. Ji, Z. Tang: Verteporfin-loaded supramolecular micelles for enhanced cisplatin-based chemotherapy via autophagy inhibition. *J. Mat. Chem. B* 10, 2670 (2022) DOI: 10.1039/ D1TB02583J

4. **B. Yu**, Q. Jin, J. Ji: Natural products applied in acute kidney injury treatment: polymer matters. *Biomat. Sci.* 12, 621 (2023) DOI: 10.1039/D3BM01772A

5. H. Gao, T. Zhang, Y. Lei, D. Jiao, **B. Yu**, W. Yuan, J. Ji, Q. Jin, D. Ding: An organophosphorescence probe with ultralong lifetime and intrinsic tissue selectivity for specific tumor imaging and guided tumor surgery. *Angew. Chem. Int. Ed.* 63, e202406651 (2024) DOI: 10.1002/anie.202406651

6. J. Zhao, J. Fu, F. Jia, J. Li, **B. Yu**, Y. Huang, K. Ren, J. Ji, G. Fu: Precise regulation of inflammation and oxidative stress by ROS-responsive prodrug coated balloon for preventing vascular restenosis. *Adv. Funct. Mat.* 33, 2213993 (2023) DOI: 10.1002/adfm.202213993

7. Y. Huang, Y. Chen, Z. Lu, **B. Yu**, L. Zou, X. Song, H. Han, Q. Jin, J. Ji: Facile synthesis of self-targeted Zn^{2+}-gallic acid nanoflowers for specific adhesion and elimination of gram-positive bacteria. *Small* 19, 2302578 (2023) DOI: 10.1002/smll.202302578

8. J. Li, J. Zhang, P. Yu, H. Xu, M. Wang, Z. Chen, **B. Yu**, J. Gao, Q. Jin, F. Jia, J. Ji, G. Fu: ROS-responsive & scavenging NO nanomedicine for vascular diseases treatment by inhibiting endoplasmic reticulum stress and improving NO bioavailability. *Bioact. Mat.* 27, 239 (2024) DOI: 10.1016/j.bioactmat.2024.03.010

Patents

1. J. Ji, Q. Jin, B. Yu, W, Dai: Application of 1,2,5-tri(4-boronphenyl)benzene in the preparation of inducers for cellular pyroptosis. China Patent CN119074741A, 2024 (Granted)
2. J. Ji, Q. Jin, B. Yu: Fabrication and application of a hydrogen peroxide-responsive supramolecular fluorescent probe with high water solubility. China Patent CN118373929A, 2024 (Pending)